



## PATENT ABSTRACTS OF JAPAN

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**B23K 9/013****B21B 45/06****// C23C 14/56**(21) Application number: **03271201**(71) Applicant: **NIPPON STEEL CORP**(22) Date of filing: **18.10.91**(72) Inventor: **TAKEUCHI JUN****(54) APPARATUS AND METHOD FOR VACUUM ARC DESCALING**

large part of the scale under the pressure in the low arc voltage.

**(57) Abstract:**

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**PURPOSE:** To reduce the required electric power consumption by having different pressures in plural treating chambers and making higher pressure as coming to the follower process of the treatment.

**CONSTITUTION:** In order to independently execute the vacuum arc descaling treatment in the plural treating chambers 8a, 8b, the pressure is independently controlled to each. In this purpose, an evacuating system is independently arranged to plural treating chambers 8a, 8b. The treating pressure for executing the descaling at the first step is 10-50pa and this pressure is the min. value of the vacuum arc voltage. The treating pressure for executing the descaling at the second step is lower than the treating pressure at the first step, such as about 5 pa. By such degree of the pressures, the scale is scarcely remained and these pressures are in the pressure range economically obtd. in the low cost. That is, what the descaling is treated under the high vacuum after treating under the low vacuum, removes the remained scale under the high vacuum perfectly removing the scale after removing a

